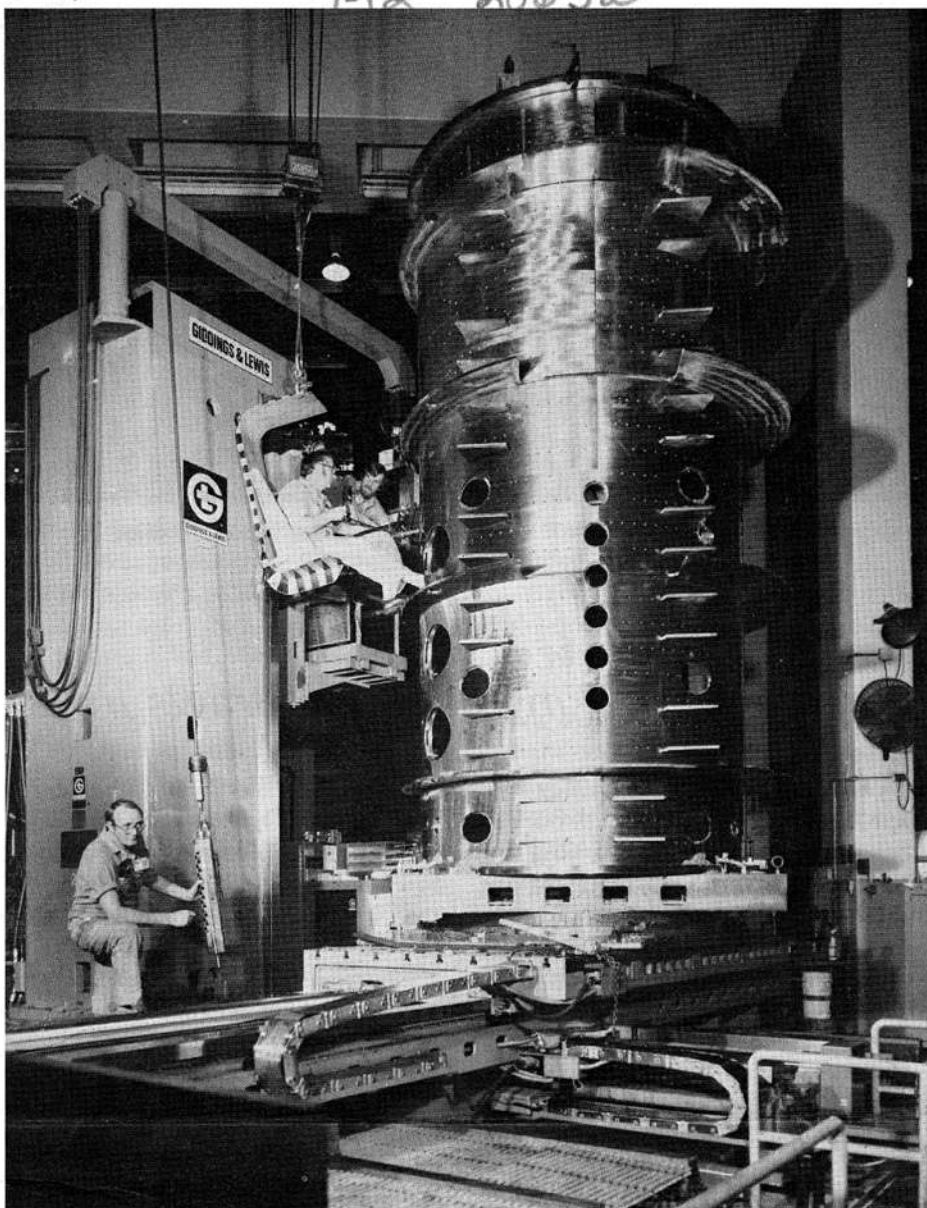


# Nuclear Division News

• Vol. 13, No. 10 • May 13, 1982



**SEPARATOR VESSEL FOR AVLIS** — The Materials Handling Development Module (MHDM) is one of the key components in the development of the Atomic Vapor Laser Isotope Separation (AVLIS) process, which was recently selected by DOE as "the" advanced uranium enrichment technique for further development and demonstration. The separator vessel for the MHDM, which will serve as a test bed for developing future module hardware, is being fabricated in the Y-12 Machine Shop. Shown with the vessel are, from left, Tommy R. Justice, Gerald E. Carden and Larry K. Hamilton, Fabrication Division.

## New process for enrichment techniques set at ORGDP

DOE has announced its selection of the Atomic Vapor Laser Isotope Separation (AVLIS) process as the advanced uranium enrichment technique for large-scale engineering development and demonstration. The AVLIS process has the potential for significantly reducing the cost of enriching uranium for use in nuclear power reactors.

This process, being developed by Lawrence Livermore National Laboratory, is one of three Advanced Isotope Separation (AIS) processes that have been under research and development for more than five years. The other two processes are the Plasma Separation Process (PSP) being pursued by TRW, Inc., and the Molecular Laser Isotope Separation (MLIS) process being worked on by Los Alamos National Laboratory.

The Nuclear Division has been a major participant in the development of all three processes and will continue to have a role in the engineering and demonstration of the AVLIS process. Each of the four Nuclear Division facilities has made significant contributions to the AIS program.

- The Y-12 Development Division has a lead role in developing the uranium handling technology for both AVLIS and PSP.

- Enrichment Technology at ORGDP adapted uranium hexafluoride ( $UF_6$ ) handling technology to the MLIS process and has done basic spectroscopic studies on  $UF_6$ .

- The Operations Analysis and Planning Division is responsible for making process and economic assessments and has participated with

(Please turn to page 8)

## Statement given by R. F. Hibbs to Nuclear Division employees

This is the text of a statement by Roger F. Hibbs, President of the Nuclear Division of Union Carbide Corporation, read to employees on Monday, May 3:

Union Carbide Corporation has informed the Department of Energy of its intention to withdraw as the contractor for the four government-owned nuclear energy facilities in Oak Ridge and Paducah it has operated since the mid-1940s. The Corporation has offered to extend the current contract, which expires on September 30, 1983, for a period of up to three years to provide the Department of Energy adequate opportunity to secure a qualified replacement contractor.

The decision not to renew the contract is based on Union Carbide's strategy of concentrating its resources and management attention on those commercial businesses in which it has achieved a leadership position.

On the basis of the Corporation's decision, it is conceivable that Carbide will continue to operate the Nuclear Division facilities for up to four and one-half years from now. I realize that employees will have many questions about the impact a change of contractor may have on them. At this time we do not have the answers to most of these questions, and it is possible that it will be many weeks, and possibly months, until all questions associated with the change can be answered.

Union Carbide takes pride in the many significant contributions its employees have made in uranium enrichment, energy research and development, and weapons fabrication. In connection with the transition to a new contractor, Union Carbide's principal interest will be that our missions are continued without interruption and that our employees are given maximum protection.

The Corporation understands that a definitive plan for a successor contractor will be developed by DOE. This change is expected to have little, if any, impact on employment at the Oak Ridge and Paducah facilities.

(See related stories on page 3.)

## In this issue...

Students from the Oak Ridge and Sweetwater school systems received an advance peek at Union Carbide's "See How They Run" exhibit at the 1982 World's Fair in Knoxville. Photos of their special "Media Day" visit to the exhibit, which features some 150 battery-powered toys and games, are found on pages 4 and 5.

The Union Carbide Retirees Association's monthly column is found on page 7, along with a special feature on retiree volunteers who are serving as volunteer hosts and hostesses at Nuclear Division visitor sites during the World's Fair period.

Other features:

New appointments .... page 2  
Question Box ..... page 2  
Recreation ..... page 6





# Fortney named to corporate staff; Phillips to succeed him

James E. Phillips, MD, a staff physician at Paducah, has been named medical director at ORGDP, effective June 1. He succeeds T. Guy Fortney, MD, who has been appointed regional medical director for Union Carbide Corporation's midwestern area.

Phillips received his MD degree from the University of North Carolina's School of Medicine at Chapel Hill.

Prior to joining the Nuclear Division in 1977, Dr. Phillips served in the U.S. Air Force (1962-66) and was in general practice. He is a member of the American Medical Association.

Dr. Phillips and his wife, the former Betty Hardin, currently reside on Cleary Drive in Paducah. They plan to move to the Oak Ridge area in the near future.

Dr. Fortney had served as ORGDP medical director since 1974. He received his MD degree from the University of Louisville School of Medicine in 1951. He was in private practice from 1952 until he joined Union Carbide in 1972.

Dr. Fortney is a member of the American Medical Association, Roane-Anderson County Medical Society, the Tennessee Medical Society and the American Occupational Medical Society.

He and his wife, Betty, have five grown children.

Dr. Fortney will be located at the Corporation's Speedway Plant, Engineering Products Division, in Indianapolis, Ind. He will have responsibility for the Linde, Engineering Products, Films-Packaging and Metals Division.



T. Guy Fortney



James E. Phillips

## Johnson new department head

D. Ray Johnson, a group leader in ORNL's Metals and Ceramics Division, has been appointed head of the Materials and Chemistry Department in the Process Support organization at ORGDP.

Johnson was born in Fayetteville, N.C. He received BS and MS degrees in ceramic engineering and a PhD degree in materials engineering from North Carolina State University. He was selected the outstanding PhD candidate at North Carolina State University by the Phi Kappa Phi honorary society in 1970.

He joined the Nuclear Division in 1974. Johnson has served in various positions in ORNL Metals and Ceramics, and most recently was leader of the ceramic technology group.

Johnson is chairman of the Research Committee of the American Ceramic Society's Nuclear Division. He and his wife, Susan, live in Andersonville with their three children.



Johnson

## Patents

Bertram Fleischer, ORGDP, "Rotor Tube for Gas Centrifuge."

Jones B. Arnold, Y-12 Plant, "Method for Producing Highly Reflective Metal Surfaces."

Charles A. Hahs and Charles H. Burbage, ORGDP, "Valve for Gas Centrifuge."

## Question Box

### Secondary smoking question draws ire

A reader of the Question Box has expressed disagreement with our response to a question concerning the attendance of nonsmokers at safety meetings where some attendees do smoke. As part of that response, it was stated "there is no unanimity of opinion concerning the health effects of sitting or working near people who do smoke." The reader believes this statement to be incorrect.

Whether our statement was accurate or not, it is apparent that many people are concerned about the health effects of exposure to others' cigarette smoke. Dr. T. A. Lincoln, UCC medical director, has agreed to address the question of "Passive Smoke" in his May 27 "Medicine Chest" column.

In the meantime, the reader expressing disagreement has provided the following statement:

"Scientific evidence has linked involuntary (passive or second-hand) cigarette smoke exposure to adverse health effects. Children of smoking parents have more bronchitis and pneumonia during the first year of life. Acute respiratory disease caused more restricted activity days and more bed disability in children whose families smoked than in those whose families did not. A large study (over 2,000 subjects) demonstrated that nonsmokers chronically exposed to involuntary smoke exposure in the work place have small airway changes equivalent to those changes found in light smokers. These changes are dose dependent, as the severity of small airway changes has been shown to be greatest in the heavy smoker and least in the light smoker or the nonsmoker exposed to second-hand smoke. Small airway changes are the earliest changes seen in persons who develop chronic obstructive lung disease. Acute adverse changes in the nonsmoker exposed to involuntary smoke can be

measured by blood levels of carbon monoxide (CO) which become elevated upon exposure of an individual to involuntary tobacco smoke. Since red blood cells have a greater affinity for CO than for oxygen, there is an impairment of the oxygen-carrying capacity which is proportional to the amount of CO picked up and carried in the body. The amount of CO in the blood of nonsmokers exposed to heavy tobacco smoke doubles after one hour of exposure and redoubles during the following hour. Since the half-life for CO excretion is four hours, it takes longer to excrete CO than to pick it up.

"Two recent studies demonstrated increased risk of lung cancer in non-smoking wives of smoking husbands. The risk increased in relation to the amount of the husband's smoking. Other hazards that have been demonstrated to be caused by involuntary smoke exposure are:

1. Persons with asthma develop asthmatic lung changes when exposed to involuntary smoke.

2. Persons with angina are more likely to have angina attacks when exposed to involuntary cigarette smoke.

"The 1982 *Report of the Surgeon General* has documented these and other research findings which raise concern about involuntary smoke exposure as a serious public health problem."

## 260th dividend set

The board of directors of Union Carbide Corporation has declared the company's 260th consecutive dividend. The amount is 85¢ a share on the outstanding capital stock of the corporation, payable June 1, 1982, to stockholders of record on May 7, 1982.

This is the same as the dividend paid to stockholders on March 1.

UNION  
CARBIDE

## Nuclear Division News

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INTERNATIONAL ASSOCIATION  
OF BUSINESS COMMUNICATORS

Published every other week  
for employees such as:



R. L. (Rocky) Cline of ORNL's  
Laboratory Protection Division.



## 'Long-time, exceptionally effective contractor for department,' Hart says

Following is a statement from Robert J. Hart, manager of the Department of Energy's Oak Ridge Operations, in connection with an announcement from Union Carbide Corporation of its intention to withdraw as the contractor for four large DOE facilities in Oak Ridge and Paducah, Ky.

"Union Carbide has been a long-time, exceptionally effective operating contractor here at Oak Ridge for the Department of the Army, the Atomic Energy Commission, the Energy Research and Development Administration and the Department of Energy for almost forty years. We respect the company's decision to step down and to do so over a period of several years and we are gratified to note that Union Carbide has also provided very strong assurance to DOE management that it will operate these facilities as long as necessary to assure an orderly transition.

"I have asked my staff to begin a study of the various options available to us for contracting for the operation of the four facilities so that we may obtain earliest approval for a plan of action. We expect that, given the opportunity to approach the replacement of Union Carbide over a rather lengthy period, DOE will be able to attract other equally qualified contractors. It is highly unlikely that we will seek to provide for operation of

the current complex of four major facilities and the provision of all of their support services by a single contractor. Our current thinking, at least at the moment, suggests a segmentation of the complex and the selection of several contractors to operate portions of it.

"Transfer of the activities to other contractors will be complex and time consuming but must be handled so as to assure that the operations will be transferred with as little disruption as possible.

"The answers to most of the more obvious questions — those having to do with job security, conditions of employment, etc. — must of necessity await the selection of replacement contractors. DOE will certainly have the opportunity, in the course of establishing selection criteria and subsequent operating parameters, to influence continuity of operations through the retention of current Carbide employees and even some key Carbide management people by the selected contractors."

## Union Carbide announces plans not to renew DOE contract

This is the official statement released by Union Carbide Corporation, from its Danbury, Conn., headquarters, May 3:

Union Carbide Corporation has announced that it has informed the Department of Energy of its intention to withdraw as the contractor for the four government-owned nuclear energy facilities it has operated in Oak Ridge and Paducah, Ky., since the mid-1940s. The Corporation has offered to extend the current contract, which expires on September 30, 1983, for a period of up to three years to provide the Department adequate opportunity to secure a qualified replacement contractor.

The decision not to renew the contract is based on Union Carbide's strategy of concentrating its resources and management attention on businesses in which it has achieved a leadership position. The Corporation has no other defense-related operations.

The Corporation said it takes pride in the many significant contributions of its employees in uranium enrichment, energy research and development, and weapons fabrication.

Union Carbide and the DOE will cooperate in the operation of the facilities to provide a smooth transition of the activities, with maximum concern for the 18,000 Union Carbide employees in the complex. The Corporation understands that a definitive plan for a successor contractor is under development by the Department of Energy. This change is expected to have little, if any, impact on employment at these facilities.

Union Carbide Corporation first began its contract activities in Oak Ridge in January of 1943 under the Army's Manhattan Engineer District at the Oak Ridge Gaseous Diffusion Plant and subsequently assumed responsibility for operation of the Oak Ridge Y-12 Plant in 1947, the Oak Ridge National Laboratory in 1948, and the Paducah Gaseous Diffusion Plant in 1950.

Through its Nuclear Division, the Corporation currently employs almost 17,000 at Oak Ridge and 1,400 at Paducah under a single cost-plus-fixed-fee contract. The operating cost of these facilities is in excess of one billion dollars annually.

## Mary Ross promoted at Y-12

Mary P. Ross has been named head of the Accounting and Budget Department of the Y-12 Plant's Finance, Materials and Services Division.

A native of Robbins, Tenn., Ross attended the University of Tennessee. She joined the General Accounting Division in 1954, serving as staff accountant, accounting and budget supervisor and financial coordinator prior to her transfer to Y-12 in 1978.

Ross' most recent position has been as budget and accounting specialist. She lives on Beaver Creek Drive in Powell.



Ross

## Save Energy / Share The Ride

### ORNL

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

FREE RIDE — Van pool needs riders and backup driver from Walker Springs area (Sans Souci, Plantation Manor, Wesbridge, Brendon Park and Crestwood Hills) to any portal, 8-4:30. Mike, plant phone 4-4885; home phone 691-4194.

VAN POOL RIDERS NEEDED from Sutherland Avenue and Papermill Drive area to ORNL, 8:15-4:45. D. P. Atkins, plant phone 4-5463; home phone 584-3766.

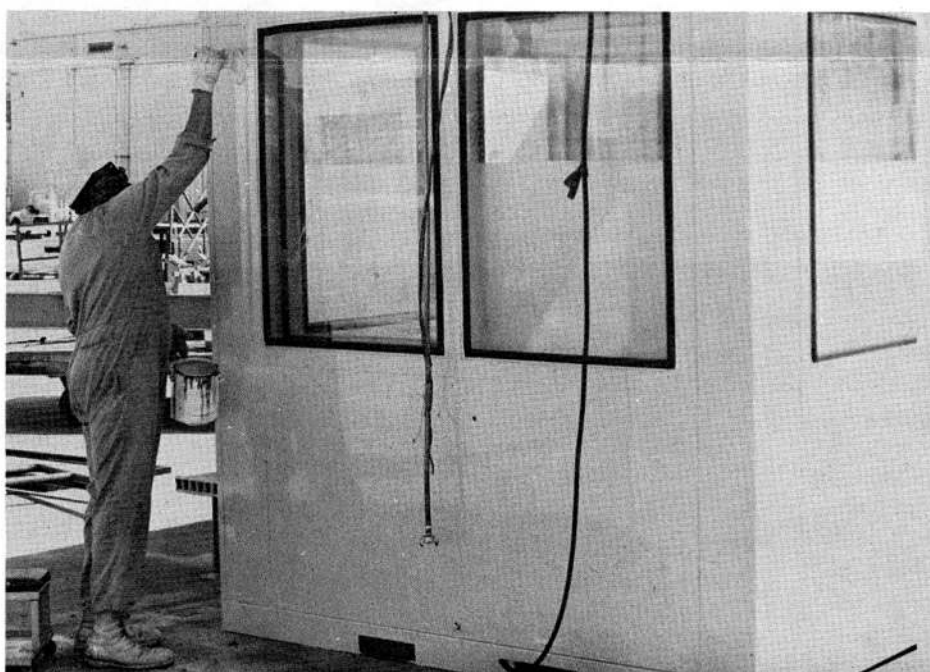
### Y-12

RIDERS from Harriman or Kingston to North or Biology Portals, 8-4:30. W. L. McKinney, plant phone 4-1261; home phone Harriman 882-1827.

CAR POOL MEMBER WANTED from Knoxville, Middlebrook Pike/Robinson Road/Piney Grove Church Road (Landmark, Stonebrook and Canby Hills subdivisions), to East Portal, 8:15-4:45. J. W. Nave, 4-4485; or J. W. Simms, 4-5926.

### Next issue...

The next issue will be dated May 27. The deadline is May 19.



**CLEAN UP, FIX UP** — It's that time of year again when the world takes on a fresh, new look with the appearance of spring blossoms, bright colors and a new paint job. E. E. White, left and James Bell, above, employees in the Paducah Plant's Maintenance Division, recently spent a sunny day brushing up on their craft.



## *'See How They Run' exhibit delights children at 1982 World's Fair*

Some 600 students from the Oak Ridge and Sweetwater school systems got a special pre-view April 30 of Union Carbide's "See How They Run" exhibit at the 1982 World's Fair.

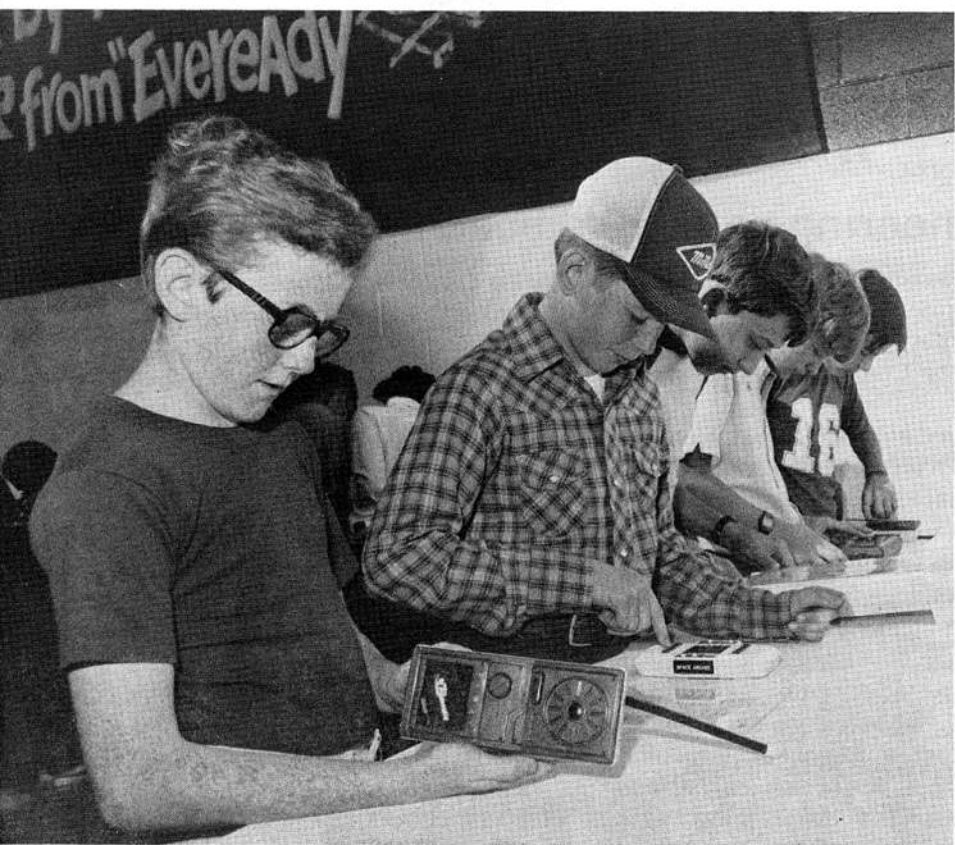
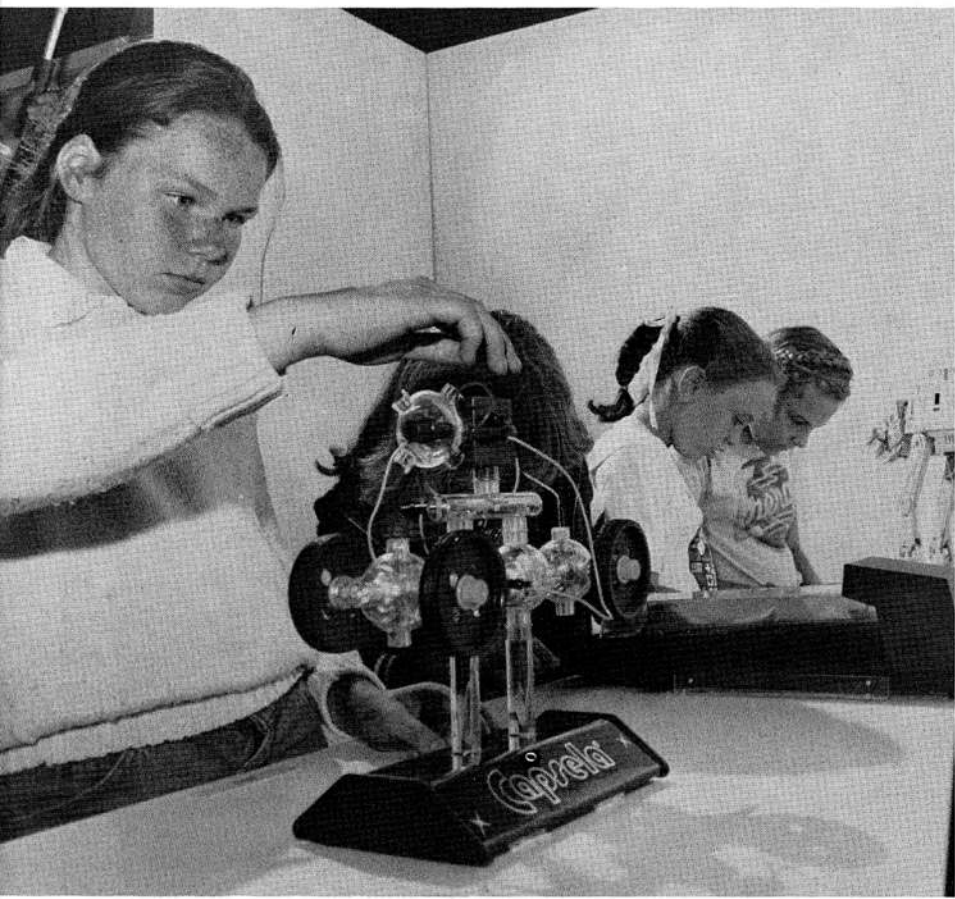
The students toured the exhibit, which consists of some 150 battery-powered toys and games, during a "Media Day" preview 24 hours before the Fair opening.

UCC Senior Vice President Robert D. Kennedy also toured the exhibit, along with Nuclear Division President Roger F. Hibbs. At right, Kennedy, center, and Hibbs greet Leigh Ann Waller, exhibit hostess.

The exhibit, featuring toys and games powered by "Eveready" ENERGIZER batteries, is located in the Fair's Lifestyle and Technology Center.









# Tee-Off Time Application for

May 22, 1982

(Check Appropriate Plant)

- ☐ Y-12—Dead Horse Lake  
☐ ORNL—Wallace Hills  
☐ ORGDP—Southwest Point

Time Preferred \_\_\_\_\_

Leader 1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_

COMPLETE AND RETURN TO THE Y-12 RECREATION OFFICE  
 Y-12 — BUILDING 9711-5, MS-1

Entries must be received prior to drawing on May 19, 1982.

Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Please call the Recreation Department, 4-1597, after 8:00 a.m. Thursday for time.



## Bowling alley notes...

### C League...

The Y-12 C League saw the Badgers take the big roll-off recently from the Mini-Strikes. The Badgers, consisting of Bud Leete, Jim Thompson, Jack Dillon, Bill Johnson and Jim Hummel, were the league's first-half champs and bettered the Mini-Strikes comfortably. Season high awards went to the Mini-Strikes, with a handicap series of 3194; the Sunflowers with an 1151 single; to John Patton, series of 762; and Winfred Shoopman, single of 295.

### ORNL A League...

Elwood's Chargers charged into the Dynamics to win the ORNL A League crown, out-bowling the Dynamics. The Chargers are made up of Elwood McCulley, Bob Hagood, Greg Holton, Bobby McKnight and Nick Case. The highest average was held for the season by Dave Stacy, 184; the highest series of the year, Bill Montgomery, 721; the high handicap game of the year by Wayne McLaughlin, 302. The most improved bowler, Brian Worley, progressed 15 pins during the season.

### Carbide Wednesday...

The Remkeys won the roll-off over the Operators by a score of 3076 to 2787. They were led by Jim Croley's 242/593 scratch game and series. Other winning team members were Ray Walker, Roy Clark, Glenn McNabb and Darrel Arthur, with Tom Akin and Captain Clarence Guyer lending a hand.

In final nights of bowling Ray Smith rolled a 625 scratch series; Elwood McCulley a 667 handicap one. In singles Norm Teasley had a 218 scratch game and Terry Tiegs, a 262 handicap single.

### ORGDP Women...

The Mousechasers are still a 10-point leader in the ORGDP Women's Bowling League, as they posted an 845 single handicap; a 2447 series recently.

Vickie Conner rolled a 198 single game; Sherry Hill, a 250 handicap single; and series of 533/692.

### Classic League...

The Ridgers took the roll-off in the Classic League, downing the Atta Boys 3058 to 2931. C. R. Lively led the champions with a 596 scratch series; while Bill Maddux rolled a 586 for the losing squad.

### K-25 Tuesday...

The Mishaps moved back into first place in the K-25 Tuesday Bowling League recently. C. E. Pride rolled a 592 scratch series; J. L. Hengstler posted a 675 handicap series. In singles it was D. Pollitt with a 222 scratch and Hengstler with a 249 handicap single.

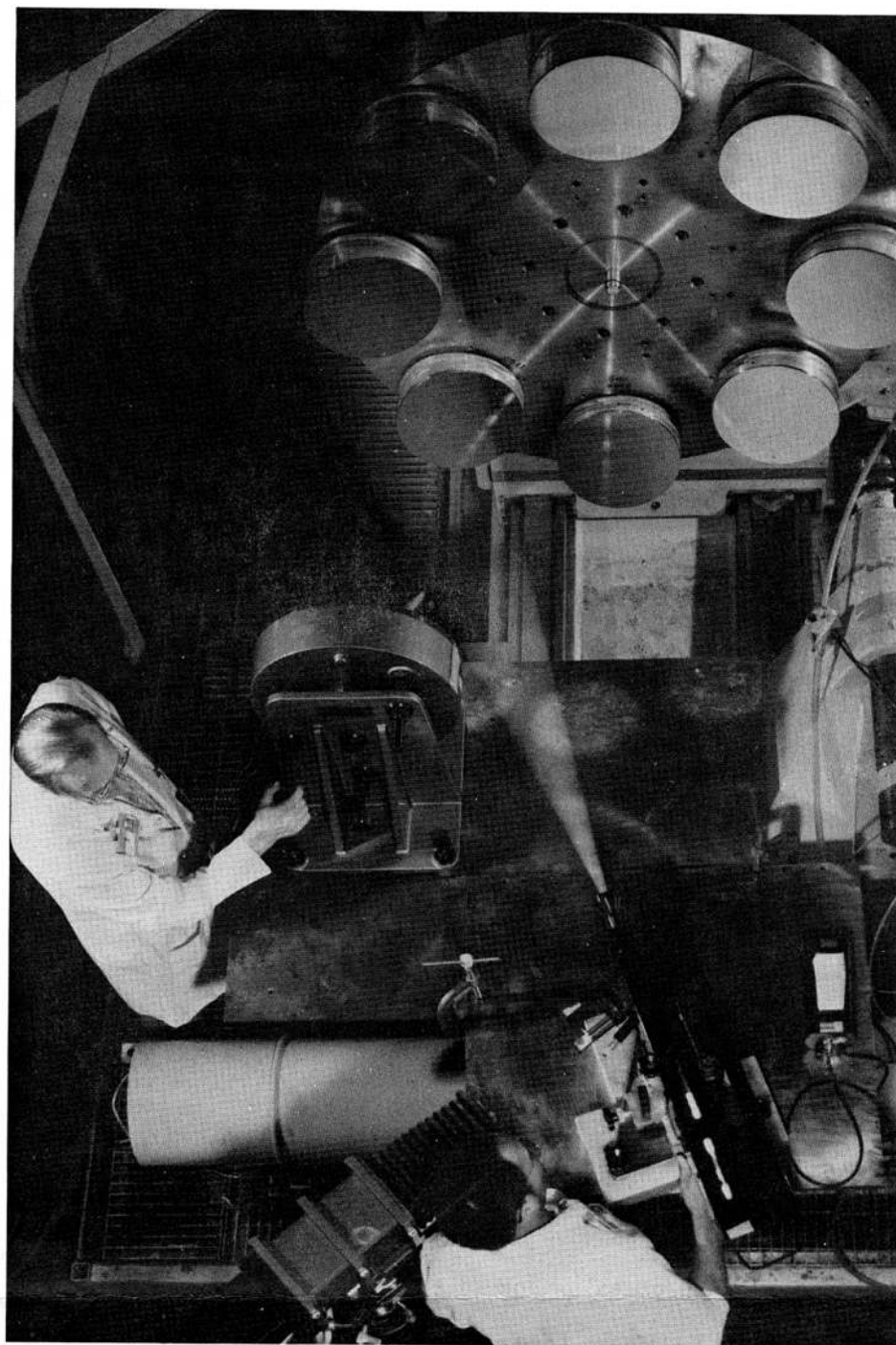
### Monday Mixed...

The Pacesetters still cling to the lead in the UCC Monday Mixed League, outrolling the Go-Getters and Free Spirit teams. Churchill Moore still holds the high scratch series of 643 in the league, as does Cheryl Womack with a 627. In handicap scoring it is Joe Carr, 701; and Mary Johnson, 698.

### Badminton?...

Badminton, anyone?

The Highland View gymnasium is reserved every Tuesday and Sunday evening at 6:30 p.m. for Carbide employees interested in competitive badminton. All employees are welcome.



Fahey

## Fahey's photo takes top award

David Fahey, ORNL Photography Department in Y-12, took first place in industrial photography in recent competition. His "Laser Inspection of Fusion Mirrors" was deemed the best by the Southeastern Professional Photographers Association. The photograph and an article on Fahey and other winners will be featured in an upcoming issue of the SEPPA's magazine, **Southern Exposure**.

## Engineering sets '50's beach party' theme

"50's Beach Party" is the theme of Engineering's annual picnic planned for Saturday, June 5, from 9 a.m. to 6 p.m. at the Clark Center Recreation Park.

The feast will include a steak sandwich, corn on the cob or potato chips, tossed salad, ice cream or watermelon, and a choice of beverage. A kids' plate will include a hamburger or two hot dogs for the main course. Meals will be served from noon to 6 p.m.

The featured entertainment will be music by "Dancers", a car show of 50's vintage automobiles, a fashion show by "A Touch of Class Fashions", The Performing Arts

Dance Center and a presentation of "Camelot" by the Oak Ridge Playhouse.

There will be sporting events such as the softball tournament, the 5000-meter run, hole-in-one contest and a volleyball tournament. Participants can also be challenged by the hula-hoop contest, Volkswagen stuff, chug-a-lug contest or the 50's dance contest.

The children won't be left out, because they can ride ponies or the Kern's merry-go-round. There will be an Art Festival and organized games with prizes and awards.

Ticket prices are \$3 for adults and \$1.50 for children.



# Union Carbide Retirees Association

UCRA

P.O. Box 3501 P.O. Box 238  
Oak Ridge, TN 37830 Paducah, KY 42001  
576-1786

News editor: Al Burris Associate editor: Warner Taylor

Don't forget our reunion/picnic at the Clark Center Park on Friday, June 4, from 10:00 a.m. to 4:00 p.m. All Carbide retirees, spouses, widows and widowers are invited, UCRA memberships are not required! A lunch of hamburgers, potato chips, apple pie, orange drink and coffee will be available for \$1 for those who prefer not to bring their own. Please remember to bring your own folding chairs, too!

A special feature at the picnic will be a display of souvenirs — things you have saved from your travels, from an outstanding event or from your antique bargain hunting.

George M. Winn, retiree from ORNL, has written that he hopes to attend the reunion. We'll be looking for you, George!

(Special thanks to the Y-12 Credit Union for providing prizes for this occasion.)

## Staffing visitor locations

If you haven't signed up as a host/hostess, substitute or "buddy" for welcoming visitors to the Carbide facilities, you are missing something very enjoyable! Those of us who are participating quickly learned that we didn't need degrees in science or engineering to answer the visitors' questions. Detailed information is found on the tapes they hear, or in the handout material. Most visitors want to be asked where they are from, where they are staying, etc. So if you've been waiting to sign up until you knew what to expect, you can be sure you'll do just fine! Please come and join us. If you're interested, just call our number or the Public Relations Department at 574-4163.

## Bowling

The UCRA bowling season ended April 26 with a roll-off between the

first- and second-half winners. The close contest was won by the "Go-Getters" team of M. J. Gibson, George Bullock, Ruby Ratjen and Polly Moore. Second-place trophies and Lela Delmonte. (Look for photos of the winning teams in a future column.)

April highlights: Men's scratch game — Ernie Bogle, 220; men's scratch series — Ernie Bogle, 604; women's scratch game — Abbie Bugg, 209; women's scratch series — Mary Eckhardt, 517.

## Golf

Don Matlock says that over 40 people have joined the UCRA golf league. There is still time to join, so interested persons should call Don at 483-6733.

## Bridge

The bridge "Marathon" will begin June 10 and will continue through September. Bridge is played the second and fourth Thursdays of each month at 1:00 p.m. at the Oak Ridge Senior Center. For more information call Charlie Kienberger, bridge committee chairman, at 482-2566.

## Travel

We're sorry that so many of you missed the Kentucky Derby trip because your reservations were not made early. Remember, we plan to offer the trip again next year, and we hope your names will head the list of reservations.

For the Las Vegas trip, our first bus to the airport was quickly filled. A second bus has been obtained, so more space is now available. Make your reservations now to take advantage of this special transportation!

# Safety Scoreboard

Time worked without a lost-time accident through May 6:

Y-12 Plant.....	111 Days	4,129,000 Employee-Hours
ORGDP .....	83 Days	2,071,253 Employee-Hours
ORNL .....	726 Days	16,978,352 Employee-Hours
Paducah.....	646 Days	5,601,000 Employee-Hours

# Volunteers begin duties at Division visitor areas

Members of the UCRA "Volunteer Corps" recently attended final orientation sessions at ORGDP and ORNL and are now on duty as volunteer guides at Nuclear Division visitor sites.

The group consists of some 60 retirees and their spouses. Twenty-five are assigned to the ORGDP Visitor Overlook, and the remaining 35 greet visitors at the Graphite Reactor, Aquatic Ecology Laboratory and Visitor Overlook at ORNL.

Each of these areas is equipped for a largely self-guided tour, through literature, descriptive displays and audiovisuals. The volunteer guides are on hand to greet, assist and respond to questions from visitors during the World's Fair period.

Any retirees or their spouses who are interested in becoming volunteer guides or in serving as substitutes may call the Public Relations Department at 574-4161.

Volunteers assigned to the ORGDP Visitor Overlook include: Lee H. Barnett, Oak Ridge; G. Stanley and Mattie Dalton, Harriman; Virginia Donahoe, Oak Ridge; L. P. and Ellen Edwards, Oak Ridge; Freeman Fox, Knoxville; Thomas H. Handley, Oak Ridge; Richard W. Hayes, Knoxville; Clarence D. Hawkins, Knoxville; Noah E. Howard, Harriman; Edward C. Johnson, Concord; Donal and Ima Jones, Jamestown; Ted Kwasnoski,

Oak Ridge; Fletcher Madison, Knoxville; Albert J. Mallett, Oak Ridge; W. D. McCluen, Harriman; Anna and John Perry, Kingston; Terry H. Robbins, Kingston; R. Damon Trainor, Oak Ridge; Carlos Vanover, Harriman; and J. E. Vineyard, Sweetwater.

Retirees and spouses on duty at the ORNL sites include: U. L. Alsbaugh, Oak Ridge; Leo J. Brady, Oak Ridge; David W. Cardwell, Oak Ridge; Alice and William Cobb, Oak Ridge; Waldo Cohn, Oak Ridge; Leonard Crump, Oak Ridge; James D. Gill Sr., Oak Ridge; John Gillette, Oak Ridge; James G. Hallau, Oak Ridge; R. C. Herrell, Powell; Ray L. Hill, Knoxville; Zola Hill, Pigeon Forge; Eva and George Hudson, Oliver Springs; Frances Hurley, Oak Ridge; Bob Kernohan, Oak Ridge; H. V. Klaus, Knoxville; John R. Lund, Oak Ridge; Sarah McIntyre, Oak Ridge; Arthur F. Ogden, Oak Ridge; Jacquelin and Roscoe S. Pressly, Loudon; L. A. Robinson, Knoxville; Marvin Schwenn, Oak Ridge; Dramia M. Smith, Oak Ridge; Thomas C. Swindell, Knoxville; Alex C. Tinley, Knoxville; Hurcil B. Vaughan, Knoxville; Marjorie Walker, Oak Ridge; R. E. Webb, Oak Ridge; and Hal Williams, Oak Ridge.

ORNL employees John Pinajian and Mary Ann Neal also are serving as volunteer guides on weekends.



**AT ORGDP BRIEFING — "Volunteer Corps" members attended a final orientation session recently at the ORGDP Visitor Overlook. Members of the Nuclear Division Public Relations Department were on hand to answer questions and distribute information to the volunteers.**



**AT ORIENTATION SESSION — Retiree volunteers assigned to ORNL visitor sites attended a final orientation session at the Laboratory's Visitor Overlook.**



# New enrichment techniques

(Continued from page 1)

the development organizations in a year-long series of laboratory peer review sessions which supported the DOE process selection effort.

- Engineering provides design engineering support, including design and cost studies for the development module and production plant.

- Several ORNL divisions have contributed technical expertise in such areas as plasma physics, atomic and molecular spectroscopy, instrumentation and control systems design, and solid-state physics.

- PGDP provided a study on the methods and costs for feed and product materials processing for the atomic vapor processes.

In the AVLIS process, uranium metal feed material is melted and vaporized to form an atomic uranium vapor stream. When this stream is illuminated by precisely tuned laser light, the uranium-235 atoms absorb the light and become ionized. They are then extracted from the vapor stream by an electromagnetic field which deflects the ions to a product collector. The U-238 atoms remain uncharged and pass on to the tails collector.

Initially, the main thrust of AVLIS process development will be to resolve technical performance issues so that design can proceed for construction of a development module. The module, to be located at the Oak Ridge Gaseous Diffusion Plant, is scheduled for operation by 1987. This facility will establish the engineering feasibility of the AVLIS process and provide a firm basis for projecting costs of future production facilities.

Currently, about 60,000 square feet of the Barrier Manufacturing Building at ORGDP is being renovated to accommodate AVLIS experimental facilities. The existing facilities, now located in the Y-12 Development Division, are scheduled to be moved to ORGDP in 1983.

DOE also announced that it will continue to provide support for research and development of PSP to make use of the superconducting magnet preprototype system already operating at TRW. The Nuclear Division will continue to support this research effort with analysis and computer modeling activities.

## ASCET cites Nuclear Division

The Nuclear Division has been selected by the American Society of Certified Engineering Technicians (ASCET) as the "Employer of the Month."

Because of the honor, the Nuclear Division is featured in a full-page article in the March/April issue of *Certified Engineering Technician*, ASCET's official journal. The citation reads:

"...the Nuclear Division has encouraged employees to participate in the full range of ASCET activities at the national, regional and local levels. It has supported attendance at conferences; contributed to the Robert C. Hopkins Scholarship Fund which was established at State Technical Institute in Knoxville in honor of a deceased employee and member of

ASCET; and supported participation in the annual WATtec Conference, an energy symposium sponsored by technical societies during Engineers' Week. Many recipients of the scholarship, which provides for training of engineering technicians, were later hired as full-time employees of the Nuclear Division."

The article, accompanied by a photograph of the Y-12 Plant, also provides historical information and brief descriptions of the four Nuclear Division facilities and their missions. This is the second time since 1978 that the Corporation, through the Nuclear Division, has received this honor.

C. Ed Miller, Y-12 Development Division, is chairman of the Honors and Awards Committee of ASCET's Southeastern Region.

## Roberts promoted in engineering

Douglas D. Roberts has been promoted to head the mechanical engineering product certification gauging section of Y-12 Engineering.

A native of Tellico Plains, Tenn., Roberts received his BS degree in mechanical engineering and his MS in engineering administration from the University of Tennessee in 1973 and 1977, respectively.

Prior to joining the Nuclear Division as a draftsman in 1967, Roberts worked for two years for the Midland-Ross Corporation. He has worked in various engineering capacities at Y-12, and most recently was a design specialist.

Roberts is registered as a professional engineer in Tennessee and is



Roberts

a member of the Tennessee Society of Professional Engineers and the Hydroponic Society of America. He and his wife, Linda, live on Maryville Pike in Knoxville, with their son and daughter.

## Savings Plan-Personal Investment Account

	Fixed Income Fund	UCC Stock	Equity Investment Fund
December 76	13.0553	59.2723	8.8166
December 77	14.2017	40.9096	8.0427
December 81	20.2727	50.6990	12.5180
January 82	20.4581	47.7191	12.4762
February 82	20.6405	44.4513	12.0397
March 82	20.8225	45.3317	12.0058

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 11% for 1982. Union Carbide stock values are the average cost of stock purchased during the month. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. The price of each unit is determined by dividing the total value of the securities by the number of units in the Fund.

## Anniversaries

### ORGDP

#### 35 YEARS

Mildred E. Freytag, Purchasing.

#### 30 YEARS

James V. Green, Maintenance; Robert J. Groben, Engineering; Ray C. Keever, Separation Systems; A. J. (Gus) Legeay, Plant Managers; Howard A. Phillips, Finance, Materials and Services; Ellen B. Queener, Maintenance; Martha B. Roberts, Computer Sciences; Grant W. Sitzler, Maintenance; Kenneth L. Smith, General Accounting; Clint Sulfridge Jr., Technical Services; and Edward Vonhalle, Operations, Analysis and Planning.

#### 25 YEARS

Bobby L. Carter, Richard L. Clark, George M. Doyle, Henry C. Norris Jr., John H. Peer and Gerald V. Pierce.

#### 20 YEARS

Roy D. Bundy, Mary T. Grubb, James E. Park, Jack T. Parr, Anthony F. Francis, Johnny M. Wells and Benjie E. Williams.

### Hi Power Rifle...

Larry Weston, ORNL, took the second High Power Rifle Tournament shooting a 744 out of a possible 800. Hugo Bertini, also of ORNL, placed second with 732; and Roger Wiegand, Y-12, took third place with a 721.

Other scores were: R. Crawford, ORNL, 701; Harold Fell, Y-12, 626; R. Hatmaker, TIC, 591; A. Beasley, Y-12, 573; and D. Mobley, ORNL, 545.

### Y-12

#### 35 YEARS

J. B. Quinn, Guard Department; and Jack L. Finchum, Utilities Administration.

#### 30 YEARS

John S. McMurray, Dispatching; and Roy G. Cardwell Jr., Production Optimization.

#### 25 YEARS

Billie E. Jolley.

#### 20 YEARS

Lester B. Swift and Leon A. Brooks.

### ORNL

#### 35 YEARS

Herbert M. Buffington, Laboratory Protection; Cova P. Baker, Analytical Chemistry; and Elmer L. Gilbert, Operations.

#### 30 YEARS


Richard P. Cumby, Instrumentation and Controls; John M. Miller, Operations; and John W. Fields Jr., Plant and Equipment.

#### 25 YEARS

Harold G. Smith, Johnnie E. Blevins and Ralph L. Clark.


#### 20 YEARS

James F. Murphy, James R. Rhodes, Odessa P. Madison, Lois M. McGinnis and Frances A. Scarboro.



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